

٥

0

0 0 •

0

反応室15

ガス排出口 16

14 ガス多人口

1 米 板

12石英ヘルジュー

7.馬周使コイル

31 光反射構造体

Patent Abstracts of Japan

PUBLICATION NUMBER

63045199

PUBLICATION DATE

26-02-88

APPLICATION DATE

08-08-86

APPLICATION NUMBER

61187220

APPLICANT: KYUSHU DENSHI KINZOKU KK:

INVENTOR: ISHIKAWA TSUGIO;

INT.CL.

C30B 25/08 C30B 25/10 // H01L 21/205

TITLE

VAPOR GROWTH DEVICE

ξ,

ABSTRACT: PURPOSE: To contrive to make film thickness of crystal growth layer uniform and to improve product yield, by arranging an approximately pyramidal susceptor in a bell-jar having outer peripheral length lessening from the top toward the bottom and setting a light reflecting structure of spherical surface of polygon at the outer peripheral part.

> CONSTITUTION: An approximately pyramidal susceptor 10 having the top part opposing to the side of a gas inlet 14 is set in a bell-jar 12 equipped with the gas inlet 14 and a gas outlet 16 in the vertical direction, bases 1 are supported and a reaction gas is introduced to a reaction chamber 15. The gas is heated by a high-frequency coil 7 set at the outer peripheral part and a crystal layer is grown in vapor by chemical reaction on the bases 1. In the vapor growth device of a barrel type having the constitution, the reaction chamber 15 consists of the bell-jar 12 in the form wherein the outer peripheral length is gradually lessened from the top toward the bottom, and the reaction gas is made uniform. Further, a light reflecting structure 31 having a reflecting face made of spherical surface of polygon is set at the position opposing to the bases 1 at the outer peripheral part of the bell-jar and radiation heat is efficiently sent to the surface of the bases 1. Temperature gradient of the bases 1 at both sides is corrected and bending and crystallographic slippage are prevented.

COPYRIGHT: (C)1988, JPO& Japio